

April 12, 2007

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April 12, 2007

Commissioner Deborah Taylor Tate  
Federal Chair, Federal-State Joint Board on Universal Service  
Federal Communication Commission  
445 12<sup>th</sup> Street, SW, Portals II, Room: 8-A204  
Washington, DC 20554

Commissioner Ray Baum  
State Chair, Federal-State Joint Board on Universal Service  
Oregon Public Utilities Commission  
550 Capitol Street, SE, Suite 215  
Salem, OR 97308

***EX PARTE PRESENTATION***

*Re: High-Cost Universal Service Support, WC Docket 05-337;  
Federal-State Joint Board on Universal Service, CC Docket 96-45.*

Dear Commissioner Tate and Commissioner Baum:

Embarq strongly supports the substantial and continuing efforts of the Federal-State Joint Board on Universal Service (the Joint Board) to reform the federal universal service fund (USF) so it may better advance the universal service goals set forth in the Telecommunications Act of 1996. Telecommunications markets have changed substantially in the decade since the current federal USF was created and, accordingly, substantial reform is necessary to accomplish those goals. To this end, the Joint Board can best ensure that USF reform fulfills the statutory goals for universal service by recommending that the Federal Communications Commission:

1. Focus on correcting the structural problems caused by the multiplicity of support recipients and the misallocation of support;
2. Stabilize the current system of universal service support;
3. Limit the duration of a freeze or cap so as to make it temporary;
4. Initiate a study to identify the highest-cost areas at a granular level; and
5. Follow a clear and achievable process to complete the study, and then provide support dollars to the areas identified by the study.

If the Joint Board recommends these steps, and the Commission adopts them, federal USF will become the “specific, predictable and sufficient”<sup>1</sup> program called for in the statute.

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<sup>1</sup> 47 U.S.C. § 254(b)(5).

Federal USF finally will provide “explicit”<sup>2</sup> support to those high-cost areas where it is truly uneconomic to provide service—that is to say where the marketplace conditions would not provide sufficient incentives for any carrier to offer service. This, in turn, will ensure that “quality services [are] be available at just, reasonable, and affordable rates”<sup>3</sup> that are that are “reasonably comparable” in rural and urban areas.<sup>4</sup>

**I. THE JOINT BOARD SHOULD RECOMMEND CORRECTION OF THE STRUCTURAL PROBLEMS CAUSED BY THE MULTIPLICITY OF SUPPORT RECIPIENTS AND THE MISALLOCATION OF SUPPORT.**

There is widespread recognition that the current USF suffers from significant structural problems. In particular, the current USF does not satisfy important statutory criteria set forth in Section 254 of the Communications Act. It does not provide specific, predictable, and sufficient support in all (or even most) high-cost areas. The federal USF does not adequately preserve and advance universal service, and it continues to rely on implicit rather than explicit support through extensive use of cost averaging in the face of competition that renders such an approach unspecific, unpredictable, and insufficient. Finally, the federal USF does not ensure access to supported services at rates that are affordable, reasonable, and comparable to rates in urban areas.<sup>4</sup>

At the outset, Embarq emphasizes that USF reform need not impact many carriers, such as many small and mid-sized, rural incumbent local exchange carriers (ILECs), that are unaffected by the structural problems identified below. Indeed, these carriers would retain all of their current options under Embarq’s proposals in this document, which would not necessarily alter USF treatment for those carriers. In particular, the study to more accurately identify high-cost areas to support that Embarq proposes herein would be *voluntary* and any new support provided to previously-overlooked areas would come directly from correcting the structural problem of duplicative support. The study and related granular targeting of support would not, therefore, necessarily disturb USF treatment of currently-supported ILECs.

The record in this docket contains hundreds of filings, a great many of them detailing the problems and the urgent need for reform, and the Joint Board itself identified the problems and the need for reform at its last *en banc* hearing.<sup>5</sup> This evidence and analysis leads inexorably to the conclusion that the Joint Board should recommend, and the Commission should promptly reform two critically important structural flaws in federal USF.

1. Duplicative support is being awarded to multiple competitive eligible telecommunications carriers (CETCs) operating in a single market area. This policy has been the primary source of excessive growth in USF support, as noted by Chairman Martin and others.<sup>6</sup> The multiplicity of support and excessive USF growth harms

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<sup>2</sup> 47 U.S.C. § 254(e).

<sup>3</sup> 47 U.S.C. § 254(b)(1).

<sup>4</sup> 47 U.S.C. § 254(b)(3).

<sup>5</sup> Federal-State Joint Board on Universal Service *En Banc* Meeting February 20, 2007.

<sup>6</sup> Opening remarks of Chairman Kevin Martin, Federal-State Joint Board on Universal

consumers everywhere by increasing both the cost to provide service and the aggregate demand for USF contributions.

2. At the same time, however, many of the highest-cost areas—many designated as “rural” and many others designated as “non-rural”—do not receive “sufficient” high-cost support. This was confirmed by the United States Court of Appeals for the Tenth Circuit<sup>7</sup> for the non-rural fund, and it is equally true for many carriers that receive support under the rural fund due to the current practice of using averages (on a statewide or study area basis) to determine the need for support.<sup>8</sup> This failure to direct specific, predictable, and sufficient support to all areas that are truly uneconomic to serve harms consumers by inhibiting network investment in high-cost areas and perpetuating implicit subsidies in lower-cost areas.

The Joint Board can best accomplish its objectives by issuing a Recommended Decision that focuses on steps to eliminate these structural flaws. In particular, Embarq agrees with Windstream that the Joint Board should “recommend forward-looking and rational universal service reforms that target adequate explicit support to high-cost areas. To do otherwise, would perpetuate the inequities and insufficiencies in the current mechanism to the detriment of rural consumers and the Nation.”<sup>9</sup> Moreover, by fixing this structural flaw, the Commission can finally comply with statutory mandates and the remand in *Qwest v. FCC*.

## **II. THE JOINT BOARD SHOULD RECOMMEND STABILIZING THE CURRENT SYSTEM OF UNIVERSAL SERVICE SUPPORT.**

The first step to fixing the USF structural flaws is to prevent further harm, and to do so sooner rather than later. The current growth in support, particularly increases that fund competition in areas where it is uneconomic for a single provider to offer service, harm consumers and investment. AT&T and Verizon<sup>10</sup> have each recently filed plans addressing this issue. Both of these plans propose that USF reform occur in two stages: (1) imposing a temporary freeze or cap on USF distributions to stabilize the system and permit the Commission to address current concerns regarding fund size, fund growth, and magnitude of contribution factor; and (2) restructuring the method by which USF support is distributed.

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Service En Banc Meeting February 20, 2007.

<sup>7</sup> *Qwest v. FCC*, 398 F.3d 1222, 1234 (10<sup>th</sup> Cir. 2005).

<sup>8</sup> E.g., letter from Eric N. Einhorn, Windstream, to Deborah Taylor Tate, FCC and Ray Baum, Or. Pub. Serv. Comm’n, WC Docket No. 05-337 filed April 2, 2007 (“Windstream Ex Parte”).

<sup>9</sup> Windstream Ex Parte, at 3.

<sup>10</sup> See Letter from Robert W. Quinn Jr., AT&T, to Deborah Taylor Tate, FCC and Ray Baum, Or. Pub. Serv. Comm’n, WC Docket No. 05-337 filed March 22, 2007 (“AT&T Ex Parte”). See also letter from Kathleen Grillo, Verizon, to Deborah Taylor Tate, FCC and Ray Baum, Or. Pub. Serv. Comm’n, WC Docket No. 05-337 filed February 9, 2007 (“Verizon Ex Parte”).

As the first phase of a two-phase plan, a temporary freeze or cap would accomplish the important goal of immediately eliminating any additional upward pressure on the end-user USF assessment, which is currently up to 11.7%. For the past four years, the overwhelming majority of the growth in high-cost support has been driven by growth in wireless receipts while wireline receipts having stayed constant or declined.<sup>11</sup> This has happened because wireline support has long been subject to a cap. Therefore, the most direct and narrowly-tailored, and competitively-neutral approach to the problem is to address wireless support during this interim period.

Given that the purpose and justification for a temporary freeze or cap is to support long-term reform, it is critical that the freeze or cap be accompanied by a study to identify the truly high-cost areas in the United States. The Joint Board should recommend, therefore, that the Commission conduct such a study during the course of a temporary freeze or cap. The public interest is best served through informed decision making, which can only be helped through a study of the cost of providing service. In fact, this information is vital to any reform the Commission may consider, as explained below. A temporary freeze or cap will help ensure that the study results are relevant (the freeze or cap will help maintain the conditions that will be revealed through study) and accurate (the freeze or cap will help minimize gaming).

All other things being equal, a temporary freeze would be preferable to a cap in economic terms since it ensures that no individual recipient would be made any worse off or any better off as a direct result of the freeze during the interim time frame. Conversely, a cap on funds may allow for the possibility of individual winners and losers *underneath* the cap as relative support amounts continue to be adjusted. This would be undesirable from a policy perspective as it would make study results less accurate and relevant to the Commission's objectives.

### **III. THE JOINT BOARD SHOULD RECOMMEND THAT ANY FREEZE OR CAP BE TEMPORARY.**

There are, of course, some risks involved in implementing any type of freeze or cap; one being the natural tendency to apply a temporary remedy and then act as if the problem has been solved. The Joint Board must emphasize, therefore, that any temporary freeze or cap is a means to an end, rather than an end in and of itself. Accordingly, Embarq agrees with AT&T when it proposes strict time limitations—a maximum of two years—on the duration of any freeze or cap.<sup>12</sup> A freeze or cap of any longer duration would only perpetuate the implicit subsidies that plague the current USF.<sup>13</sup>

The Commission has the authority to impose a temporary freeze or cap, particularly in a case like this where the Commission requires market stability while it studies where and how to best allocate USF support to the high-cost areas that most need it. The implementation of a temporary freeze or cap on USF support is logical because it is imperative that the Joint Board and the Commission address the underlying structural problems that are inherent in the current

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<sup>11</sup> See Letter from Jamie M. (Mike) Tan, AT&T, to Marlene Dortch, FCC in WC Docket No. 05-337 filed April 2, 2007

<sup>12</sup> AT&T Ex Parte

<sup>13</sup> See, 47 U.S.C. § 254 (directing that implicit subsidies be made explicit).

USF system. A temporary freeze or cap will provide the Joint Board and Commission with the necessary stability and time needed to accomplish this structural reform in a manner that ensures the ongoing sufficiency, specificity and predictability of the federal mechanism.

The Commission enjoys considerable discretion to adopt interim rules while it undertakes long-term changes to its regulations. This is particularly so where the interim rules merely “maintain the status quo so that the objectives of a pending rulemaking proceeding will not be frustrated.”<sup>14</sup> In the case of USF reform, a temporary freeze or cap is particularly appropriate given the rapid increases in overall support and the substantial changes in support levels for individual carriers, including substantial decreases in support for some carriers. As the United States Court of Appeals for the District of Columbia Circuit has explained, “[a]voidance of [such] market disruption pending broader reforms is, of course, a standard and accepted justification for a temporary rule.”<sup>15</sup>

#### **IV. THE JOINT BOARD SHOULD RECOMMEND A STUDY TO IDENTIFY THE HIGHEST-COST AREAS AT A GRANULAR LEVEL.**

During the course of a temporary freeze or cap, the Commission will be in a position to undertake a detailed study that will identify the best means for addressing the structural problems identified above. Windstream is correct when it observes that the public interest will not be served by perpetuating the current system, which is rife with inequities and logical failings. Therefore, the Joint Board should recommend solutions for both structural problems discussed above—duplicative support in some areas *and* inadequate support in others. One approach to solving both problems would be to direct support freed up by fixing the duplicative support problem toward fixing the inadequate support problem.

As described at length during the Joint Board’s recent *en banc* on universal service, the ability to accurately identify high-cost areas at a very granular level has reached a level of precision that was unimaginable only a few years ago.<sup>16</sup> Through a combination of advances in modeling, better data, and ever-increasing computing power the Commission has at its disposal a set of tools capable of producing a study to ensure that all high-cost areas that truly require explicit support are adequately supported. This is in stark contrast to the data and modeling capability that was available nearly ten years ago, when the Commission and Joint Board first considered using a study to determine USF needs.

A study would support, and would be a necessary precondition to implementing a proposal like, AT&T’s. AT&T states as much in its *ex parte* presentation where it wrote that, in order to ensure *sufficiency* of support to all high-cost areas—including areas that do not currently receive high cost support due to averaging—it is necessary to determine the *need* for support at a

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<sup>14</sup> *MCI Telecoms. Corp. v. FCC*, 750 F.2d 135, 141 (D.C. Cir. 1984); *see also CompTel v. FCC*, 117 F.3d 1068 (8<sup>th</sup> Cir. 1997).

<sup>15</sup> *CompTel v. FCC*, 309 F.3d 8, 14 (D.C. Cir. 2002) (*citing MCI Telecoms. Corp.*, 750 F.2d at 141; *ACS of Anchorage v. FCC*, 290 F.3d 403, 410 (D.C. Cir. 2002)).

<sup>16</sup> *See* presentation of Jim Stegeman, CostQuest Associates, Federal-State Joint Board on Universal Service *En Banc* Meeting, February 20, 2007.

more granular level (“...in narrower geographic areas, such as wire centers or Census Block Groups”).<sup>17</sup> The Joint Board should recommend this be done by undertaking a comprehensive study that more accurately identifies high-cost areas at a wire center or sub-wire center level.

A study would also facilitate and accelerate the implementation of any recommendation along the lines of a proposal like Verizon’s. Should the Commission ultimately choose auctions as the best mechanism for addressing the problem of duplicative support awarded to multiple CETCs in a single area, it is important that the Commission identify the areas that most need support. Conducting a study would help the Commission avoid many of the uncertainties and risks inherent in using an untested approach such as reverse auctions to determine which areas would be in need of support. The structural problems with the current USF make it a poor guide for identifying the right areas to support. Moreover, it is important to understand the costs of serving areas on a granular level in order to correctly size the individual auction areas. Therefore, a granular understanding of which areas are truly high-cost is essential to ensure that the areas to be “bid” on in any auctions are those that best serve the public interest and fulfill the objectives of the Communications Act.

In sum, a granular study would facilitate any long-term USF solution, and it would do no harm. Moreover, a granular study identifying the truly high-cost areas to serve will also produce the information needed by the Joint Board and Commission to evaluate future directions for the federal USF mechanism and for USF policy in general. For example, the granular study would serve as an effective tool for identifying areas where it is uneconomic for the market to deploy broadband. The Commission’s long-stated goal of advancing broadband deployment—whether as a supported service or not—requires a comprehensive understanding of the geographic hurdles (density, distance, absence of critical mass of consumers) and incremental investment needs that currently providers face as they bring advanced services to the most rural, high-cost areas.

**V. THE COMMISSION SHOULD FOLLOW A CLEAR AND ACHIEVABLE PROCESS TO STUDY HIGH-COST AREAS, AND THEN PROVIDE SUPPORT DOLLARS TO THE AREAS IDENTIFIED BY THE STUDY.**

The actual process for conducting a study to identify high-cost areas in need of USF support is clear and achievable. First, Embarq proposes that the Commission should maintain the support rules for companies that choose not to submit data for a study. Then, the Commission should follow a five-step process to study high-cost areas and identify new areas that should receive support. Finally, the Commission should use study results to direct adequate support to the newly-identified high-cost areas.

**A. The Commission Should Maintain the Support Rules for Companies That Choose Not to Submit Data for a Study.**

Embarq proposes that ETCs have the option not to participate in the study. Such ETCs would continue to receive support as they do today. They would, however, remain subject to any applicable reforms, such as auctions (which may only apply to a subset of ETCs under some of

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<sup>17</sup> AT&T Ex Parte, at 8.

the proposals before the Joint Board). It is also important to note that a solution to this structural problem concerns identifying which areas should receive support and directing to those areas the support that is currently misallocated due to the first structural flaw discussed above—supporting duplicative ETCs. The question of which carriers should receive support and how that support is to be calculated will be resolved in these new areas using the same methodologies that are chosen for currently-supported areas. In particular, ILEC costs are used to identify high-cost areas today, and the study would follow this approach.

**B. The Commission Should Follow a Five-Step Process to Study High-Cost Areas and Identify New Areas that Should Receive Support**

*The Joint Board should recommend that the Commission determine that cost of service is directly related to population density, and that study-area averaging masks wide variations in the true cost of service.* In general, low density translates to high cost. Because all network technologies (even wireless) exhibit economies of scale and economies of density, there is a strong inverse relationship between cost and customer density. This relationship can be used to begin the process of accurately identifying high-cost areas. Many study areas exhibit a large degree of variation in density, which translates to a large degree of variation in costs. The current system of using study area averages masks this variation in costs within a single study area. In particular, the assumption that costs can be averaged is no longer valid because of competition in low-cost areas, which prevents companies from realizing greater margins in those areas and using those returns to support below-cost service in high-cost areas.

The actual process for completing such a study is relatively straightforward, and the study can be completed within the two-year time frame of the freeze or cap. The Joint Board should, therefore, recommend that the Commission take the following actions:

1. Collect population density data from companies choosing to submit such data for study purposes;
2. Validate the population density data using Census data and establish the need for granular analysis;
3. Collect customer location data from the companies that qualify for granular analysis;
4. Select a suitable model for estimating cost of service; and
5. Identify the high-cost areas at a granular level using the selected model and submitted data.

*1. Collect population density data from companies choosing to submit such data for study purposes.* In the first phase, if a company believes that the use of study area averaging masks its high cost areas, and therefore its need for USF support, such companies could choose to submit disaggregated density data (for example, by wire center or at a sub-wire center level) to the Universal Service Administration Company (USAC). The National Exchange Carrier Association (NECA) could also submit data on behalf of pooling companies that choose to participate but which may not feasibly be able to submit their own data. The purpose of this

showing would be to demonstrate that significant variation in the density of areas served by the carrier causes the carrier to experience significant variation in costs.<sup>18</sup>

2. *Validate the population density data using Census data and establish the need for granular analysis.* USAC would independently verify this data using publicly available Census data to determine whether the data showed significant variation in density. If so, the strong density/cost correlation would allow USAC to conclude that this area exhibited significant variation in costs (regardless of how costs might be calculated). The preliminary evaluation would serve as an initial bright-line test that this company's need for USF support must be determined at a more granular level.

3. *Collect customer location data from the companies that qualify for granular analysis.* At that point, a company that had initially submitted density data and passed the bright-line test would then have the option of providing additional data to USAC regarding wire center boundaries (just as it now provides Form 477 data at a zip code level). The company would also have the option of submitting customer location data to USAC. Location data could be actual geo-coded locations, billing addresses, or service addresses.<sup>19</sup> This data would remain proprietary and would be held by USAC. It would be combined with public data (such as CB boundaries, road systems) to be used to calculate costs (and ultimately, support).

4. *Select a suitable model for estimating cost of service.* Because companies' actual cost records do not generally exist at granular levels, it will be necessary to use a model to estimate the cost of providing service of companies that choose to submit the above-referenced data. The Commission would direct USAC to identify a model that would most accurately estimate costs and partner with the model's developer on an ongoing basis to ensure that the use of the model would achieve the goals set forth by Congress for universal service support mechanisms. Models are currently available that are capable of producing cost estimates for the entire country at an extremely precise level, such as a single census block (CB) as identified by the U.S. Census Bureau. To attain the level of accuracy necessary, the model must incorporate—to the greatest extent possible--real-world engineering practices and real-world network characteristics (such as road systems), as well as geo-coded customer locations into its forward-looking costing methodology.

5. *Identify the high-cost areas at a granular level using the selected model and submitted data.* To determine which areas are uneconomic to serve and therefore require support, the

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<sup>18</sup> Until and unless a rule change is implemented that wireless carriers would receive USF support based on something other than ILEC costs there would be no need for wireless carriers to submit data. If such a change is made, competitive ETCs could, at their own choosing, also submit density data regarding their designated service areas (which in many cases mirror existing study areas.)

<sup>19</sup> Since wireless recipients are already required to provide "line" counts to USAC at the wire center level all wireless companies that are USF recipients already have the capability of providing their customers' locations "by wire center" even though they themselves do not operate a network based on the concept of wire centers, if such a rule change occurred as described in the footnote above.

company-provided data (combined with publicly available data) would be input into the selected model. Costs would be calculated and then produced at a level below the study area level to maintain a reasonable degree of granularity. Results would initially be produced at the individual wire center level, which would yield an independently-identified list of high-cost wire centers that are currently masked by the averaging process.<sup>20</sup> This would give the Commission an accurate compilation of high-cost areas—in some cases entire study areas, in some cases individual wire centers (or possibly zones)—all of which are truly uneconomic to serve and therefore in need of explicit support.

**C. The Commission Should Use Study Results to Direct Adequate Support to the Newly-Identified High-Cost Areas.**

Upon completion of the study, the Commission would still need to determine how to provide adequate support to high-cost areas that are not currently receiving it. In particular, the Commission would likely want to consider how support could be provided to these areas without significantly increasing the size of USF. In the short term the Commission could implement a pilot program to begin providing some level of support to the highest-cost wire centers that had been identified by the study; wire centers where the need for explicit support has been masked by the use of study area averages. Funding for this support could come, for example, from AT&T's proposal for a 25% reduction in wireless receipts from the IAS and ICLS funds.<sup>21</sup>

In the longer term, the answer can be found through a solution to the first structural problem listed above—that of duplicative support going to multiple ETCs in a single geographic area. To the extent the Commission undertakes action to reduce the number of recipients in an area—and thereby reduce the dollars flowing to those redundant ETCs—the existing support dollars that are “freed up” can be distributed to the newly identified high-cost areas using the cost of providing service and an appropriate revenue benchmark.

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<sup>20</sup> A carrier could also request the calculation of an added level of granularity. In many cases there is significant cost variation within a single wire center, as described in Embarq's many filings in this docket. This variation can be masked by the wire center's average cost, just as wire-center-level variation often is masked within a study area average. A carrier requesting increased granularity could request that the model's results (which would have been calculated by that time) be disaggregated to a more granular level, such as zones within a wire center. This would be a very simple procedure because the actual model processing operates even more granularly. For a company that requested additional granularity, the CB level costs could be aggregated up to (for example) an inner- and outer-zone per wire center, based on contiguous CBs above-or-below a certain density. The result, in this case, would be an independently-identified list of high-cost zones whose cost characteristics are currently masked by the averaging process.

<sup>21</sup> AT&T Ex Parte at 10-11.

*April 12, 2007*

## **VI. CONCLUSION**

In conclusion, the Joint Board can best ensure that USF reform serves the public interest and benefits consumers by recommending that the Federal Communications Commission:

(a) focus on correcting the structural problems caused by the multiplicity of support recipients and the misallocation of support; (b) stabilize the current system of universal service support; (c) limit the duration of a freeze or cap so as to make it temporary; (d) initiate a study to identify the highest-cost areas at a granular level; and (e) follow a clear and achievable process to complete the study, and then provide support dollars to the areas identified by the study. Through this process, the Commission will accomplish all of its goals; it will:

- Eliminate redundant, duplicative support;
- Control fund growth; and
- Identify accurately and direct support to all high cost areas, including those that have been overlooked because of the Commission's study-area averaging approach.

Respectfully submitted,



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